

AD-A256 090



NPS-AS-92-023

2

# NAVAL POSTGRADUATE SCHOOL

## Monterey, California



EN  
92-27040  
rgs

**THE SHAPE OF THINGS TO COME:  
Trends and Projections Affecting  
Military Recruiting and  
Manpower in the 21st Century**

**Mark J. Eitelberg  
and  
Stephen L. Mehay**

**September 1992**

Approved for public release; distribution is unlimited.

Prepared for: U.S. Army Recruiting Command  
Program Analysis and Evaluation Directorate  
Research and Studies Division  
Fort Knox, Ky 40121

NAVAL POSTGRADUATE SCHOOL  
Monterey, California


RADM. R. W. West, Jr.  
Superintendent


Harrison Shull  
Provost

This report was prepared for and funded by the U.S. Army Recruiting Command, Program Analysis and Evaluation Directorate, Research and Studies Division, Fort Knox, KY.


Reproduction of all or part of this report is authorized.

This report was prepared by:

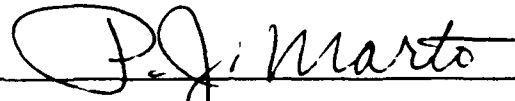
  
Stephen L. Mehay  
Dept. of Admin. Sciences

  
Mark J. Eitelberg  
Dept. of Admin. Sciences

Reviewed by:

  
David R. Whipple, Chairman  
Department of Administrative Sciences

Released by:

  
Paul J. Marto, Dean of Research

**REPORT DOCUMENTATION PAGE***Form Approved*  
*OMB No. 0704-0188*

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management Budget, Paper Reduction Project (0704-0188), Washington, DC 20503.

<b>1. AGENCY USE ONLY (Leave Blank)</b>		<b>2. REPORT DATE</b> September 1992	<b>3. REPORT TYPE AND DATES COVERED</b> Technical Report
<b>4. TITLE AND SUBTITLE</b> The Shape of Things to Come: A Compilation of Trends and Projections Expected to Affect Army Recruiting and Manpower Policy in the 21st Century			<b>5. FUNDING NUMBERS</b>  MIPR 90-28
<b>6. AUTHOR(S)</b>  Mark J. Eitelberg and Stephen L. Mehay			
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b>  Naval Postgraduate School Monterey, Ca. 93943			<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b>  NPS-AS-92-023
<b>9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b>  U.S. Army Recruiting Command, Program Analysis and Evaluation Directorate, Research and Studies Division, Fort Knox, Kentucky 40121			<b>10. SPONSORING/MONITORING AGENCY REPORT NUMBER</b>
<b>11. SUPPLEMENTARY NOTES</b>			
<b>12a. DISTRIBUTION / AVAILABILITY STATEMENT</b>  Approved for public release; Distribution Unlimited			<b>12b. DISTRIBUTION CODE</b>
<b>13. ABSTRACT (Maximum 200 words)</b>  ( SEE PAGE III)			
<b>14. SUBJECT TERMS</b>			<b>15. NUMBER OF PAGES</b> 53
			<b>16. PRICE CODE</b> N/A
<b>17. SECURITY CLASSIFICATION OF REPORT</b> Unclassified	<b>18. SECURITY CLASSIFICATION OF THIS PAGE</b> Unclassified	<b>19. SECURITY CLASSIFICATION OF ABSTRACT</b> Unclassified	<b>20. LIMITATION OF ABSTRACT</b> Unlimited

# **The Shape of Things to Come**

**A Compilation of Trends and Projections  
Expected to Affect Army Recruiting  
and Manpower Policy in the 21st Century**

by

**Mark J. Eitelberg and Stephen L. Mehay**

**U.S. Naval Postgraduate School  
Monterey, California 93943**

# TABLE OF CONTENTS

Abstract	iii
The Shape of Things to Come	1
Geopolitics	3
Societal Changes and Quality of Life	7
Attitudes and Propensity	12
Test Scores and Education	17
Demographics	22
Regional Patterns	26
The Economy	29
The Labor Force	31
Technology and Manpower Quality	36
Reserve Manpower Quality	39
Army Manpower/Personnel and Force Structure	43

DTIC QUALITY INSPECTED

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

## ABSTRACT

*The Shape of Things to Come* is a compilation of material from the "Army Futures" project, a major study of various trends that are likely to affect the manpower and recruiting policies of the U.S. Army in the years ahead. The research effort was sponsored by the U.S. Army Recruiting Command and directed by the authors at the Naval Postgraduate School, Monterey, California. A two-day conference was held in January 1992 in Arlington, Virginia, as part of the "Army Futures" project. The Conference was titled "Marching Toward the 21st Century" and featured over twenty speakers, including senior officials from the U.S. Army and Department of Defense, distinguished scholars, and subject area experts from several government agencies.

*The Shape of Things to Come* draws from papers presented at the conference, from studies commissioned through the "Army Futures" project, and from other material produced in connection with the project. The following individuals participated in the conference and deserve recognition for their valuable contributions to this compilation of trends, projections, and issues (in order of appearance at the conference): MG Jack C. Wheeler; General Dennis J. Reimer; LTG J.H. Binford Peay III; LTG William H. Reno; Sam C. Sarkesian; David W. Grissmer; Marvin Cetron; Ronald E. Kutscher; Richard L. Fernandez; Lynn Karoly and Jacob Klerman; David R. Segal and Jerald G. Bachman; Mady W. Sega; Robert L. Goldich; Thomas G. Sticht; David P. Boesel; Juri Toomepuu; Martin Binkin; Charles C. Moskos; David L. Osborne; and Christopher Jehn.

In addition, the authors extend their gratitude to H. Wallace Sinaiko of the Smithsonian Institution for his useful summary of the "Army Futures" conference; and to Nita Raichart of Type Casting for designing and typing the final manuscript.

## THE SHAPE OF THINGS TO COME

As the subtitle states, this is a compilation of trends and projections that are expected to affect Army recruiting and manpower policy in the 21st Century. Over one-hundred trends are identified in eleven major areas. The possible implications of these trends are then addressed along with related issues or questions for manpower policymakers.

The material presented here was drawn from many sources. Although these sources are not listed, they cover a range of disciplines and reflect some of the best thinking on "where we are" and where we may be heading in the years ahead. An attempt was made to limit the trends and projections to those that are somehow connected to staffing the military — particularly the Army — of the future. These connections may not always be clear, and they are certainly subject to disagreement. Indeed, some may argue that "trends" are essentially footprints in history, saying much more about the *past* than about the path ahead; and, as Edmund Burke remarked in 1791, "you can never plan the future by the past."

Most historians, on the other hand, would point to ample evidence that the past is prelude to the future; or, in the words of Patrick Henry (1775), that the only means of "judging the future . . . is by the past." Typically, the attempt to see ahead — and prepare for the time to come — is based on experiences of the past, the only observation post available to persons with normal vision. In this way, we are often led to assume that forces of the past, or so-called trends, will continue throughout the future and thus show the way ahead. And here lies the weakness of our ways: unexpected occurrences in science, politics, economics, and social relations — maybe but a single event — are capable of nullifying any set of prophetic assumptions, and usually do. Add to this the fact that we can exercise some control over the "future" we wish to have. Recognizing the direction of a trend, we can decide to stay the course or intervene and attempt to change our destination.

The power to control one's future is greatly strengthened by understanding the various influences of the past and present. This is an important part of the planning process, and is the primary objective of the work presented here. *The Shape of Things to Come* was created as a resource for military manpower planners and policymakers, as a collection of useful information for asking questions, raising discussion, and ultimately helping to design the Army of the 21st Century.

## THE SEARCH FOR A COMMON THREAD

Selecting and organizing the most significant trends for military manpower from many diverse fields is not an easy task. Distinguishing "common threads" or a dominant theme — the trend of the trends — is even more difficult. Nevertheless, it is clear from the piles of material collected and sifted for this paper that there are at least two strong connecting threads: change and money.

The first of these, "change," should be obvious. No one expects the future to be like the present or the past; and, if there is one guiding principle for architects of public policy, it certainly must be "all things change." But it is not that simple now for persons involved in setting military manpower policy. The past two years have witnessed several remarkable events that promise to bring about a major transformation of the American military establishment. The end of the cold war and disintegration of the Soviet Union have caused the United States to reexamine the very purpose of its military forces and to redefine the role of the nation in world peacekeeping. At the same time, as the U.S. plans for drastic cuts in defense — reducing active and reserve forces, consolidating and closing military installations, laying off government employees, eliminating weapon systems, canceling defense contracts, pulling troops from foreign bases — the environment for staffing the military is quickly changing.

Environmental change is signaled by the rising threat (and reality) of regional conflicts around the world, creating the need for a U.S. force that can be flexible, rapidly deployed, and easily reconstituted under pressing circumstances. It may also lead to a force that projects power — through air and sea display as well as technological superiority — in place of forward deployment; and a force that depends increasingly on international alliances, economic pressures, and “non-traditional” methods for maintaining peace and protecting U.S. interests. Closer to home, environmental influences can be found in a population that holds the military in highest regard, yet questions the need to pay for it; in a fading public perception of “the enemy” and the reasons for keeping a strong, adequately equipped, staffed, and trained military force; in educational indicators, test results, and other measures showing that American teenagers lack certain higher-order skills and abilities; in a civilian labor force where new entrants are more likely to be women, blacks, Hispanics, and Asians, as the competition for talented young people heightens; in an economy with a falling standard of living and level of productivity among workers; in a society with rising numbers of two-income couples, more diverse family forms, shifting spousal responsibilities, and a swelling need for “family-friendly” conditions; and, most directly, in a military that may be expected to do the same or even more work with fewer people and resources.

The second connecting thread in the trends is “money.” This, too, may be obvious as the nation’s leaders attempt to deal with an enormous budget deficit — focusing mainly on military expenditures. Indeed, in the post-cold war era, many defense programs will become increasingly difficult to justify, especially when the public is demanding a “peace dividend.” Surveys have consistently shown over the past several years that the American people favor defense budget cuts as the preferred means for reducing the federal deficit. Under the present budgetary climate, there will be mounting insistence from the public for accountability in government spending and demonstrated value for the dollar.

The search for savings in the defense budget will probably expand as a combination of trends creates increasing competition for defense money. Studies indicate that the economic gap between the rich and the poor in America has grown over the past several decades. This gap between the “haves” and “have nots” also exists on an international scale, and it is rapidly widening. The United States will be under increasing pressure to provide economic assistance to the “have nots,” which now include nations that were once a part of the Soviet Union. It is interesting to note that economic assistance for Russia and other former Soviet republics is advocated largely on the basis of national security as well as humanitarian reasons. This suggests that funds for humanitarian aid may become a favored means of promoting national security, competing more directly with money for defense. In a relatively peaceful world it is also likely that the U.S. military will be used increasingly for humanitarian or emergency assistance in needy countries.

In addition, the competition for scarce federal money will build as a result of several demographic trends — such as the growing numbers of elderly citizens, immigrants, racial or ethnic minorities, and single parents — which can be expected to place an added burden on health care, public education, and many social services. Meanwhile, America’s unfinished “wars” — on drugs, crime, inner-city decay, unemployment, illiteracy, homelessness, poverty, and environmental pollution — will require more and more financial support. The net result of this competition for federal funds will likely find the military at the bottom of the heap, a position earned in the eyes of some by peace and preferential treatment in years past. Historically, increases in defense spending have come to some extent at the expense of social programs, and emphasis on social programs usually means less for defense. It is the traditional trade-off between “guns and butter” when resources for each are limited.

The military’s money woes may be compounded by the trend in civilian industry toward creating flexible policies — a so-called “responsive workplace environment” — for its employees.



With a shrinking supply of talented young people and a growing dependence on high-tech workers, the military may have to struggle to get its quota of high-quality recruits, even in a downsized force. With a spreading interest in family-oriented services and flexible workplace policies by rising numbers of single parents and dual-income couples (who may also be parents), the military may have a difficult time preventing its best members from shucking their uniforms for civilian life. Once again, money will be a key factor in the military's continuing effort to recruit good people, keep them content, and retain them for a full career.

It has been observed that predictions of the world to come are typically gloomy, choosing to dwell on signs of misfortune over good fortune. This compilation of trends is no exception from the standpoint of our armed forces. The American military, in outlasting its communist counterpart, has "won" the cold war and argued a case for its own demise. But history shows that there is no such thing as a "warless society"; and great nations stay that way by keeping a strong military and deterrent to war in times of peace. The American armed forces face an uncertain future, to be sure, and one that will see its fair share of problems. Still, times of great change are also opportunities to move ahead and grow in new directions. In the end, the *shape* of things to come will be our own doing.

# **GEOPOLITICS**

---

## **A. TRENDS AND PROJECTIONS**

- 1. The bipolar world of the Post-World War II period is being replaced by a multipolar world — politically, economically, and militarily.**
- 2. Reliance on nuclear force is disappearing. However, nuclear, biological, and chemical weapons are spreading to less-developed nations in the Third World.**
- 3. Weapons delivery capabilities (ballistic missiles) also are increasing in Third World nations.**
- 4. Geopolitical boundaries are becoming less important than ethnic/religious/language groupings. Also, there is a trend toward decentralized government structures.**
  - The breakup of the Soviet Union, Yugoslavia, and Czechoslovakia will create 20 new nations.
  - Yet, there are still 200 "stateless nations" -- the Sikhs in India, the Bengalis in India and Bangladesh, the Kurds in Iraq, the Tamils in Sri Lanka, the Basques in Spain, many tribes in Africa, etc.
- 5. Politically, the trend is toward separatism and fragmentation; economically, the trend is toward a growing interdependence of world economies.**
- 6. Oil will still be the major source of energy for the U.S. in the year 2000; however, oil prices are not predicted to rise significantly.**
- 7. The U.S. will continue to depend on foreign suppliers for many critical materials. At the same time, many materials are supplied by unstable nations.**
- 8. The income gap between rich and poor nations will widen. Currently, one-third of the population of the less-developed world lives in poverty.**
- 9. Slow population growth in the West stands in sharp contrast to the rapid population growth in the less-developed nations. As a result, the population of the developed world continues to age, while the population of the Third World becomes more youthful.**

## B. IMPLICATIONS

1. **U.S. national interests must still be protected in the Middle East and in other Third World nations that supply critical materials.**
2. **Population growth and poverty in the less-developed nations may fuel social problems that lead to growing tensions, both internally and with other nations.**
3. **The end of the Cold War has reduced the constraints imposed by the U.S. and former U.S.S.R. on regional enemies in the Third World. Regional conflicts are thus likely to grow in number and intensity.**
4. **The North-South conflict (between the developed and less-developed nations) will replace the East-West conflict.**
5. **Terrorist threats are likely to grow, since the Gulf War taught antagonists not to confront the U.S. directly.**
6. **The emphasis is shifting toward greater reliance on conventional weapons, which are a relatively more expensive means of deterrence than nuclear weapons.**
7. **U.S. military expenditures may fall by as much as 50% by the year 2000.**
8. **International institutions may grow in importance as a result of growing global interdependence.**
  - U.N. peacekeeping forces may become more important, especially in the Middle East and other areas of regional conflicts, such as Yugoslavia.
  - The 35-Nation Conference on Security and Cooperation in Europe (CSCE) will replace NATO and WTO.
9. **The stability formerly brought about by the rivalry between the U.S. and Soviet Union may be reestablished by the need for cooperation.**
  - Cooperation may be necessary to deal with Third World nations with considerable weapons arsenals.

## C. ISSUES/QUESTIONS FOR POLICY AND PLANNING

1. **The Army must prepare for a variety of conflicts, ranging from low-intensity to mid-intensity conventional warfare. Warning times for regional conflicts will be much shorter. Thus the force structure must be able to deploy rapidly and rely on power projection rather than forward deployment.**
2. **Current trends suggest the Army will rely more heavily on the Reserve components to meet mid-intensity, large-scale contingencies, such as Desert Storm. This may imply growth in the Reserve components relative to the active force.**
3. **The defense drawdown may increase reliance on the projection of air and sea power.**
4. **The defense drawdown may also increase reliance on technology as a force multiplier.**
5. **The future force must be versatile, deployable, lethal, and reconstitutable.**
  - *Versatility includes the correct mix of reserve-active, and heavy-light units, as well as special operations forces, sustainment stocks, and high-quality manpower.*
  - *The Army must be capable to deploy with little warning time.*
  - *Readiness requires tough, realistic training.*
6. **What strategy should be adopted? A "one-and-a-half war" scenario? But what type of wars will they be?**
7. **Improved intelligence operations will be necessary to understand the cultural, historical, economic, and social, as well as the political and military, roots of turmoil in less developed nations.**
8. **The U.S. will still be a superpower in the year 2000; but will it remain so by 2015?**
9. **Future roles for the Army will involve "nation building," disaster relief, promotion of regional stability, and counter-drug activities.**
10. **More joint-Service operations will be needed to meet the Army and military's future roles.**

# **SOCIETAL CHANGES AND QUALITY OF LIFE**

---

## **A. TRENDS AND PROJECTIONS**

**1. Important changes have occurred in the status and treatment of female workers—as more women seek careers and the number of two-income couples continues to increase.**

- There has been a greater acceptance of women in nontraditional jobs within both the military and the civilian sector.
- Two-thirds of new entrants into the U.S. labor force over the next decade will be women.
- Businesses are expected to fill labor shortages with stay-at-home mothers by offering child-care programs and job-sharing opportunities.
- In more than half of all married couples, both spouses are working. It is expected that two-income couples will represent 75% of all married couples by the year 2000. The growth of two-income couples is driven by: an increasing volume of work that can be done at home; expanding child-care facilities and services; the economic need for income from both spouses; and changing social norms for women. The growing dependence on a wife's income is indicated by the fact that more life insurance policies are now being sold to women than to men.

**2. There is a trend toward generally more equitable distribution of power between men and women—especially on the "micro-level" in marriages where both spouses work.**

- Evidence indicates a more equitable sharing of parental responsibilities between men and women, though women (regardless of working status) still carry the load.
- This will promote equal employment opportunities for women and help to narrow the "gender gap" in pay rates for comparable work.

**3. The "American family" has been transformed. Marriage and child-rearing patterns are so complex that it is difficult to develop generalizations. For example, families are now characterized by more frequent divorce, middle-aged singles, cohabitating couples, unmarried mothers, young adults living with parents, remarried and step-families, and multiple-adult households.**

- Diverse family forms are expected to become even more prevalent in the years ahead.
- Young people have been delaying their first marriages. The median age for men at first marriage was about 23 in 1975 and over 25 during the late 1980s. Similarly, the median age for women was under 20 in 1975 and close to 24 in recent years.

## SOCIETAL CHANGES AND QUALITY OF LIFE

- Birth rates for unmarried women have been increasing throughout the past two decades. Rates are substantially higher for black women than for white women—although the rate for black teenagers remained relatively stable between 1975 and 1988. By the year 2000, it is predicted that 42% of black children and 17% of Hispanic children will be living with a never-married mother.
- The proportion of children living in single-parent families is growing: from 11% in 1970 to 22% in 1989. Over half of all black children are living in a single parent home. Most single-parent families are headed by women, though the number headed by men has been rising rapidly. Single-parent households suffer a rate of poverty that is almost six-times greater than the rate for married-couple families. (The combination of single-parent and poverty trends have led to a “feminization of poverty” in recent years.) Women alone headed 13% of white families, 44% of black families, and 23% of Hispanic families in 1990.
- It is estimated that 40% of white children reach age 17 without two biological parents in the household; for black children, it is twice that proportion.
- In 1960, 43% of 18- to 24-year olds were living with their parents or in dormitories. The figure now stands at about 53%, with proportionately fewer young people living in households with families of their own.
- Divorce rates doubled between 1965 and 1975, but have remained relatively stable for the past 15 years.
- U.S. families are shrinking in size. In the past two decades, the number of households with only one child increased by more than half, while those with three or more children declined by over a third.

### **4. Automation and computer applications in manufacturing will probably lead to a shorter average work week for many civilian employees.**

- The U.S. work week is expected to drop to 32 hours (as more people enter the labor force).
- One result will be more leisure time.

### **5. There is growing interest among civilian employers in “responsive work-place” policies—recognizing that, by helping employees balance work and family responsibilities, companies can increase worker productivity and competitiveness, reduce absenteeism, strengthen recruitment, and retain valued employees.**

- Broader emphasis will be placed on creating a “family-friendly” environment.
- More companies will attempt to create flexible work schedules and expanding opportunities for people to work at home.
- More emphasis will be placed on participative decision-making in organizations, where workers gain personal involvement in setting policies that would affect them.

## **SOCIETAL CHANGES AND QUALITY OF LIFE**

- There will be continued growth in the number of flexible ("cafeteria") benefit plans, reimbursement accounts, elder care benefits, parental leave options, and other compensation programs tailored to the needs of individual workers.
- 6. The past two decades have witnessed substantial increases in drug use and crime among young people, but these trends appear to be changing.**
- Arrest rates for young adults increased dramatically between 1950 and 1980, but remained relatively stable (fluctuating modestly up and down) during the 1980s. The number of arrests for persons 18- to 24-years-old more than doubled between 1969 and 1989—with a particularly large increase occurring in arrests for drunk driving, drug abuse, and larceny/theft.
  - Illicit drug use (self-reported) among high school seniors increased between 1975 and 1980 but has since declined. In 1989, about half of all high school seniors claimed to have used an illicit drug, including 20% within the previous 30 days. In 1980, these percentages were 65 and 37, respectively. The drop in drug use is especially apparent for young people who enlist in the military. (About 58% report having quit, compared with 30% of non-military youths.)
  - Alcohol and tobacco consumption has apparently increased among the general population of youth, with greater increases for those who join the military. At the same time, the propensity to start smoking is higher for those who are attracted to military service.
- 7. There is a strong expectation of a "peace dividend," where defense cuts are used to finance domestic programs or reduce the national budget deficit.**
- This "guns-to-butter" thinking will grow in popularity, as awareness of social problems intensifies during a period of sustained peace. Pressures to take more and more from "defense" in favor of what is perceived as the "greater national threat" will eventually cause great difficulties in the military's long-range planning as well as its day-to-day operations.

## **B. IMPLICATIONS**

- 1. The military has made great strides since the end of the draft in recognizing the needs of families and in elevating the quality of military life.**

However, in a tight budgetary climate, family-related concerns may receive less attention. The trend in civilian industry emphasizes development of a "family-friendly" environment and flexible policies for employees. This trend could affect the military's competitive position in the job marketplace and make it increasingly difficult to attract and retain family-minded members—since most military jobs are less adaptable to environmental change and the organization itself is generally less flexible. The trend toward a shorter civilian work week may also hurt the military's retention programs—since many believe that service members (who have a "24-hour job") in a reduced force would have to work longer and harder to make up for personnel shortages.

## **SOCIETAL CHANGES AND QUALITY OF LIFE**

- 2. The military will have to place increased emphasis on child care and other family-oriented services—a tough budget item at any time, but even more during a drastic cutback in resources.**
- 3. Because of perceived problems with the mobilization of single-parents and dual-service parents, there may be a new push to enact some sort of "war orphans protection" bill in Congress that limits the use of these people.**
- 4. The military was once seen as a "mecca" for women seeking employment in nontraditional areas. With more nontraditional opportunities available to women in the private sector, the attractiveness of military service may decline for many American women.**
- 5. Children growing up in single-parent families may not be as interested in military service as those from two-parent families.**
  - This is still an unexplored area—but most single-parent families are headed by women (who do not have military experience), and the influence of a parent on the child's decision to join the military is important. The further implications of the poverty factor are unknown.
- 6. The rising number of two-income couples suggests that military families may become increasingly less happy about frequent moves.**
  - A military spouse, for example, may develop "employment roots" or a budding career in a particular geographic area—a problem that surfaced some time ago where surveys suggested spousal dissatisfaction with PCS moves. The increasing power of women in marriages and family affairs means that they will also exercise greater influence on their husbands' career decisions.
- 7. It has been suggested that the military be used to a greater extent as an "agent of social change."**
  - This could be a way of retaining the defense research establishment and safeguarding some military spending (as in Senator Nunn's proposal for a "Strategic Environmental Research Program"). A recognized need for defense flexibility and the surge capacity to fight a larger war could encourage the use of "double-duty dollars"—that is, programs linking national security with education, human resources development, health care, and our respective wars against drugs, crime, unemployment, illiteracy, homelessness, poverty, and environmental pollution.



**C. ISSUES/QUESTIONS FOR POLICY AND PLANNING**

- 1. To what extent should the military focus its efforts and resources on family-oriented initiatives? Can the organization develop "family-friendly" policies that rival those in the civilian sector?**
- 2. Should the military open its doors wider to women and allow them to serve in combat positions?**
- 3. What are the possible implications of changes in family structure on military recruiting and retention?**
- 4. The rise of two-income families may support the idea of "homesteading" service members as much as possible.**
- 5. Should the military become more involved in social programs? (A Navy Captain, in reference to the Navy's drug interdiction activities prior to Desert Storm: "It [the war on drugs] is the only war we've got.") Would such efforts help to preserve the defense budget and give the military a "purpose" in the eyes of the public and Congress?**

# ATTITUDES AND PROPENSITY

---

## A. TRENDS AND PROJECTIONS

### 1. Several trends emerge from large-scale surveys of American youth.

- More young women say that they *want* to serve in the military than actually *expect* to serve.
- College-bound youths are much less interested in military service than are those who do not aspire to obtain a college education — by a factor of two-to-one.
- White youths are both less expectant and less desirous of serving in the military than are blacks or Hispanics.
- Blacks are relatively less interested than whites in being a military officer.

### 2. Public confidence in the military is exceptionally high — a trend that preceded the Gulf War.

- In a 1989 Gallup survey, the military was America's "most trusted institution" — with 63% of the population expressing a "great deal" or "quite a lot" of confidence in the armed forces. Behind the military was the church/organized religion (52%), the Supreme Court (46%), public schools (43%), banks (42%), and Congress (32%). From 1973 until 1985, organized religion stood alone at the top of the list in this annual survey by the Gallup organization. In 1986 and 1987, the military took the top spot, falling to number two in 1988. Confidence in the military soared again as the nation mobilized for Desert Shield and the public had an opportunity to see America's armed forces at work in Desert Storm.
- The irony here is that surveys have also shown, throughout the past several years, that the American people favor defense budget cuts as a way to reduce the federal deficit. Similarly, prior to the Gulf War, "national defense" was ranked close to the bottom of a list of 13 possible choices for "the most important places for the federal government to spend money." Generally, under the present budgetary climate, there will be a growing public demand for accountability in government spending — and demonstrated value for the dollar.

### 3. Young adults are increasingly likely to "boomerang" or change their mind concerning education or career choices.

- Studies show that young people are less likely to make a permanent decision on (A) whether and when to go to college; (B) a college major; and (C) a job or career. For example, although a larger share of persons are enrolling in college than ever before (59%), many are "stopping out" or not beginning college immediately after high school.

## ATTITUDES AND PROPENSITY

- Young people who choose to attend college are more likely than ever before to enroll first in a two-year community college and then transfer to a four-year institution.
- Today's youth are more likely to combine work with education — which may be more an indicator of economic needs than “boomerang” attitudes.

### **4. The attitudes of youth toward U.S. involvement in war have apparently shifted:**

- Overall, there has been a large rise in the proportion of positive responses to the question, “Should the U.S. go to war to protect the rights of other countries?”
- Differences are found along racial/ethnic lines, with black youth less likely than whites to express favor for U.S. involvement in war.
- Similar questions have been presented in previous surveys of youth, showing comparatively low support for U.S. involvement in wars that do not pose a strong and clear threat to the nation (“Soviet soldiers in your backyard”). It is likely that attitudes concerning involvement in war are tied to transitory factors and cannot be predicted with much certainty.

### **5. Studies suggest that the American public has become increasingly favorable toward the use of women in nontraditional military roles (including combat); and toward homosexuals serving in the armed forces.**

- Surveys indicate that a vast majority of people support the service of women who choose to be in combat; however, many people are uneasy about requiring young mothers to fight in war. Attitudes toward “women in combat” have been affected by Desert Storm, with generally more people approving of women in nontraditional military occupations.
- There is some evidence that women who are attracted to join the military generally seek to serve in traditionally-female jobs; however, this may be an artifact of current policies, public perceptions, advertising, and recruiting programs.
- The “gay rights” movement is expected to gain continuing political leverage and acceptance in the years ahead. Survey data indicate greater tolerance for unconventional sexual preferences (a rebound from AIDS-influenced attitudes) and employment rights (including military service) for homosexuals. There will likely be a continuation of pressure placed on the military to change its policy toward homosexuals, including dissent from a growing number of institutions with ROTC programs.

### **6. Young people exhibit increasing aspirations and expectations of success (especially economic success); however, the means to achieve “success” is diminishing for most.**

- Higher education is the key; yet, only one in three U.S. high school graduates goes on to complete college.

## ATTITUDES AND PROPENSITY

- In the late 1980s, U.S. male high school graduates who did not enroll in college earned an average of 28% less in constant dollars than did their counterparts in 1973.
- 7. Job security and high pay have declined in importance as motivators for U.S. workers.**
- Survey research (Louis Harris) suggests that a primary motivator (48% of respondents) for working is "job fulfillment" or the "feeling of accomplishment."
  - However, results from "Monitoring the Future" surveys suggest that high school seniors are becoming decidedly more materialistic — with two-thirds of a recent sample saying that "having a lot of money" was "extremely important."
  - Over half of the top U.S. executives feel that the American work ethic has declined and that this will adversely affect corporate performance in the years ahead.
- 8. If the military shrinks below a certain "critical mass," it may become less visible as an important institution to the American people and thus lose its attractiveness as a challenging career choice for high-quality youth.**
- Evidence from other countries suggests that relatively small militaries experience greater difficulty in recruiting and retaining personnel.
  - A severely downsized force could become "socially irrelevant."
  - On the other hand, a smaller, high-quality force that can maintain a reasonable amount of public visibility would probably rise in public esteem.
  - There is no reason to believe that a downsized military would become "isolated" from American society or estranged from the civilian population.
- 9. Programs designed to turn former military officers into public school teachers may help to promote a positive image of the military among young people and the general public.**
- This assumes that most former officers have favorable memories of their time in service.
- 10. Very few young people from higher socioeconomic groups are attracted to service in the all-volunteer military. At the same time, few veterans have graduated from the nation's most prestigious colleges.**
- The proportion of military veterans in Congress, the Administration, and other positions of power in government has been shrinking. Future presidents may have little or no first-hand knowledge of the military.
  - As the military shrinks, even fewer of the country's future leaders will be veterans.

## B. IMPLICATIONS

1. **Attitudinal trends can be tracked and explained historically; however, predicting possible attitudinal changes or trends—even when employing scenarios with historical antecedents—is problematic.**
2. **Public confidence in the military is currently at an all-time high—as the armed forces bask in the glory of Desert Storm. Memories fade quickly, and a period of peace (with focus on timeless problems in the military organization, such as procurement waste and abuse, mismanagement, or other areas) will probably see public confidence slip.**
3. **The possible implications of losing the Soviet Union as a threat and central motivating factor are unknown. Nevertheless, it will be difficult to replace the "Evil Empire" as the U.S. military's *raison d'être* — both in the eyes of the public and within the military itself. (Who becomes the primary "bogymen" in combat training and simulations? What happens to the patriotic appeal used in recruiting? Who or what will replace the hammer and sickle as the symbol of menace to democracy?)**
4. **The downsizing of the military could affect attitudes and propensity in a profound way. If the institution fades in the eyes of the public and becomes "socially irrelevant," so goes the military as an attractive career alternative for many high-quality youth.**
5. **The All-Volunteer Force versus draft debate should be considered closed.**
6. **Because public perceptions of the military and attitudes are so important and so transitory, vigilance in recruiting and advertising should be maintained as much as possible from one year to the next.**
7. **It is likely that women will be admitted to the military's combat occupations in time; and that homosexuals will be allowed to serve. Pressure upon the military to make such changes will come from outside influences, and may be forced by Congress or the President.**

### **C. ISSUES/QUESTIONS FOR POLICY AND PLANNING**

- 1. What can be done to preserve the military's strong image among the public and keep the institution "relevant" to the changing times?**
- 2. Will a smaller force, continually under fire from budget cutters, be able to sustain the high morale of its members? Will the military be able to project itself as a safe or secure career alternative, and one that still provides a strong "feeling of accomplishment?"**
- 3. Can the military help fulfill the "increasing aspirations and expectations of success" that characterize today's youth?**
- 4. What, if anything, should the military be doing now to prepare for the inevitable changes in policy concerning the service of women and homosexuals?**
- 5. How can the military's recruiters tap into the "boomerang" generation? A triple-market strategy may be desired: one aimed at work-oriented youth; another at college-bound youth; and a third at those who are college aspirants ("boomerangers") but equally likely to remain in the military. (These are high-quality fence-sitters, attracted by educational benefits but perhaps less likely to actually use the benefits.)**
- 6. What will be the longer-lasting effects of Desert Shield/Desert Storm on public expectations or support for America's involvement in a future war? Will the American people be tolerant of involvement in a conflict that lasts significantly longer than 100 hours? Will the American people be more or less likely to support U.S. intervention abroad or deployment for a prolonged police action?**
- 7. It is clear that fewer veterans will be found in leadership positions within the federal government. How will this affect the military, if at all? Will future leaders be more likely to defer to "knowledgeable advisors" on issues relating to defense? Will there be a spillover effect on public attitudes toward the military, as reflected in the nation's leadership?**

# TEST SCORES AND EDUCATION

---

## A. TRENDS AND PROJECTIONS

**1. The scores of young people on several standardized tests are comparatively lower than in years past—but test score trends vary by instrument and population, and may not be a good indicator of student achievement.**

- Scores on the *Scholastic Aptitude Test* (SAT) have been declining since the mid-1960s. Many people believed the test-score decline on the SAT bottomed out in the 1980s. However, recent evidence shows that scores have continued to slide: in 1991 the SAT mean verbal score for young men and women (combined) hit an all-time low of 422. SAT math scores were also relatively low (474), but above the levels observed between 1975 and 1984.
- In contrast to the SAT, scores on the *American College Test* (ACT) English component have remained comparatively stable over the past 20 years and are currently (1989) at about the same level as in 1969. At the same time, the national mean score on the Math component has fallen somewhat, and is now at an unprecedented low.
- *Graduate Record Examination* (GRE) scores on the test of Verbal Ability were slightly higher in 1990 than at any time over the preceding 12 years—despite the fact that many more people have been taking the GRE (348,000 in 1990 compared with 286,000 in 1978). Scores on the GRE Quantitative Ability test have likewise increased over the past 12 years. (In contrast, scores on the Reading and Quantitative components of the *Medical College Admissions Test* have declined steadily over the same period.)
- The mean score on the *Armed Forces Qualification Test* (AFQT) for applicants to the military has remained relatively stable since 1983—and above the 50th percentile. Between 1982 and 1990, AFQT scores increased 14% for persons who entered the military.

**2. Tests designed to measure national trends in student achievement generally show little or no improvement over the past two decades, particularly in tasks involving moderately complex operations.**

- The *National Assessment of Educational Progress* (NAEP) is designed to measure national scholastic achievement across time for young people aged 9, 13, and 17. Trend data for 17-year-olds show: performance in science declined in the 1970s and improved somewhat in the 1980s, but was still lower in 1990 than in 1969; performance in math was about the same in 1990 as in 1973, but lower than in 1978; and reading proficiency was higher in 1990 than in the early 1970s (though it hasn't changed in the past six years). The ability of 17-year-olds to read at the basic and intermediate levels has risen slightly since 1980, but no change is found at the adept or advanced levels. Substantial improvement in reading ability among black 17-year-olds has occurred over the past decade.
- Findings from the *National Assessment of Literacy Skills* (a 1985 study) show that only a small percentage of the young adult population can perform tasks that involve using several

pieces of information to solve a problem or come to a conclusion. Years of education are correlated with increases in scores on this assessment. Immigrants and minorities were found to score consistently lower than nonimmigrant whites.

- American students generally score low in writing proficiency; and proficiency scores for 8th and 11th graders have fallen slightly since 1984.
- There is mounting evidence that a large proportion of young people lack information-processing skills or higher-order thinking abilities that involve applying information to practical use (e.g., using the contents of written material to formulate a plan or solve a problem and extracting numerical data to solve a computational problem).
- U.S. students are said to lack interpersonal skills (e.g., to work as a member of a team), the ability to allocate resources (e.g., to develop a work schedule), and the ability to understand work systems (e.g., to figure out how one job fits with another).

### **3. Demographic differences are found in test score trends over the past three decades.**

- The “gender gap” on verbal skills has been narrowing since 1960.
- SAT scores for most racial/ethnic minorities have been increasing relative to the scores for whites.
- *Women tend to score lower than do men on tests of proficiency in math and science (and the gap tends to widen as men and women progress through school).*
- The performance of black and Hispanic 17-year-olds on the NAEP is well below that of their white counterparts (and closer to the level of white 13-year-olds).

### **4. Young adults have completed more years of education over the past several decades, but increases have been small since 1975.**

- High school dropout rates have been declining—especially among blacks (from 29% in 1967 to less than 14% in 1989 for blacks aged 16- to 24-years-old).
- Drop-out rates for Hispanics have not changed in the past 15 years—with one-third failing to finish high school. Hispanics are also about six-times more likely than either whites or blacks to have no more than an elementary school education.
- Drop-out rates are generally higher for city dwellers and those from the South and West; and higher for those coming from disadvantaged backgrounds (regardless of race or ethnic group).



**5. Results from tests administered to students from several countries highlight the relatively poor performance of those from the U.S. and suggest a decline in American competitiveness.**

- Among a group of 12 countries and Canadian provinces, U.S. students scored dead last on a test of mathematics proficiency and ninth in science proficiency. U.S. students rated first in the amount of time spent watching television.
- A science test was administered to students from 13 advanced and developing countries between 1983 and 1986. U.S. students scored in about the middle among 10-year-olds and near the bottom among 14-year-olds. Eighteen-year-olds enrolled in biology were also tested, and U.S. students finished a distant last.
- At the same time, 53% of Ph.D. candidates in science and engineering programs in the U.S. are from foreign countries. It is estimated that more U.S. students will be actively recruited by science and engineering programs.

**6. Awareness of a decline in U.S. education, shifting demographics, and the demand for technological literacy has led to the search for innovative ways to deliver education and training.**

- New technologies are expected to greatly enhance education and training over the next decade—including job simulation stations for training, telecommunications networks across schools, increased emphasis on computer technology, the use of visual and audio aids in education through video discs, worldwide interactive video teleconferencing for information exchange activities, individualized instruction through self-paced programs on computer, and enhanced gaming and simulation techniques through technological advances in computers and artificial intelligence.
- State, local, and private agencies are becoming more involved in education by offering internships, apprenticeships, pre-employment training, and adult education. At the same time, more businesses are becoming involved in schools, job-training programs, and community service arrangements. Corporate investments in employee education and retraining are expected to grow from \$80 billion to \$200 billion annually over the next decade. (One-half of all funding for training comes from 200–300 large companies in business and industry.)
- The rapidly changing job market, together with changing requirements of new technologies will probably necessitate increased use of training programs and *retraining* programs for many adult workers.
- U.S. schools are moving toward longer academic days and year-round classes. The norm may be 210 seven-hour school days per year by the end of this decade.
- Public education is becoming dominated by minority youth who are traditionally considered at-risk. Schools are increasingly providing services once considered the domain of families, social agencies, or other organizations, such as health care, family planning, day care, drug counseling, and so on.

**7. Declining college enrollments and the rising demand for skilled, entry-level workers are expected to continue—causing colleges to expand their recruiting efforts and create collaborative programs with industry.**

- U.S. colleges and universities have become increasingly active in recruiting students to maintain their student rolls. These colleges are also recruiting older students—and by 1995 it is expected that 50% of post-secondary students will be aged 25 and older.
- Increasingly, major corporations are collaborating with universities to establish degree-granting corporate schools and programs. For example: the General Motors Institute, linkages between Penn State and a major electronics firm and between Rutgers University and a major pharmaceutical company.

## **B. IMPLICATIONS**

**1. Declines in educational attainment and test scores have received more attention than increases, but both trends were apparent over the past two decades.**

- Test score *declines* may not reflect population ability levels, since tested populations often vary over time (e.g., self-selected, college aspirants on the SAT). NAEP data are more reliable as trend indicators, showing periods of decline and improvement. However, NAEP data also suggest that scholastic achievement is lower now (on several levels) than in years past. At the same time, the technological demands and skills required for many entry-level jobs have expanded rapidly over the recent past, suggesting that the gap between the average ability levels of young people and job requirements has grown.

**2. More disturbing are indications that young people lack certain higher-order skills and abilities that are needed in the working environment. Many employers report problems in finding qualified candidates for entry-level jobs, citing deficiencies in information processing, technological knowledge, communications, problem-solving, interpersonal relations, as well as basic skills in reading, writing, and mathematics.**

**3. All of this suggests increasing competition for the services of highly-capable young people in entry-level occupations. The military should likewise expect increasing competition from post-secondary institutions (a continuing trend), as colleges and universities face a serious drop in enrollments. Businesses and colleges will also continue to draw upon the military's most successful strategies in luring and recruiting new members. These recruiting strategies may draw away many of the military's best and brightest people who would have otherwise remained in service for a full career.**

4. One of the fastest-growing segments of the U.S. population is racial/ethnic minorities, especially Hispanics (destined to surpass blacks as the nation's largest minority group by the early 21st century). Minorities (with exceptions) tend to score lower (as a group) on tests of scholastic achievement and ability; and Hispanics exceed all other groups in failure to complete high school. This suggests that there will be a proportional decrease in young people qualified for military service, especially those who would be able to serve in the military's most selective occupations (such as electronics).
5. Decreasing end-strengths and a falling requirement for new recruits lessens the potential difficulty in meeting the military's manpower needs. Rising costs of college will also work in the military's favor (assuming it can offer education benefits or attractive alternatives—and then afford to lose some personnel planning to attend college). On the other hand, erosion of benefits, pay, and quality of life could cause the military to lose its competitive edge in a stable or growing economy.

### C. ISSUES/QUESTIONS FOR POLICY AND PLANNING

1. The U.S. Armed Forces have been a leader in developing new technologies for training. Will they be able to maintain that leading edge in the face of *increasing competition from education and industry* and pressure to cut spending on research and development?
2. The military may need to create innovative alliances with education and industry to help train and educate personnel—as both a recruiting incentive and cost-cutting measure
3. It has been suggested that the military be less restrictive in screening applicants—that it relax entry standards to provide employment and training opportunities for socially, economically, or educationally disadvantaged youths. What are the costs and benefits of this for the military and the nation as a whole?
4. What are the linkages between quality levels of personnel (e.g., aptitudes and abilities) and soldier performance? Do smart soldiers make better soldiers in peace and in combat? Should a smaller force be a "smarter" force; or does a smaller force provide greater opportunities for use of personnel from lower levels of ability? Would an emphasis on tested ability limit or reduce the opportunities of one group over another? What are the costs and benefits associated with varying levels of personnel quality in a reduced force?

# DEMOGRAPHICS

---

## A. TRENDS AND PROJECTIONS

1. **By 2015, 37.8% of the population will be composed of minorities, up from 28.2% in 1990.**
  - Hispanics will grow the fastest, doubling in size over the next 25 years. The change in the ethnic composition of the population has been attributable largely to immigration from abroad.
2. **These changes will happen sooner among the younger population, who provide new entrants to the work force.**
  - In New York state, about 40% of all elementary and high school students are now racial or ethnic minorities. In 10 years this figure will approach 50%. In California, Hispanics currently account for one of every three children in public schools. Another 9% are black, and 16% are Asian or of "other" descent—making white school kids a minority in California.
3. **Immigration will continue to be a major factor in the growth of the population and labor force.**
  - In the 1980s legal immigration accounted for 27% of the increase in U.S. population and 16% of the increase in the labor force; illegal immigrants accounted for 38% and 23%, respectively.
  - Slow rates of natural population increase, aging of the population and public policy favoring immigration, means that immigrants will contribute even more to future labor force and population growth.
  - New immigrants are geographically concentrated in the 25 largest metropolitan areas.
  - The growth of the immigrant population will be highest in the South and West and in the "gateway" metropolitan areas.
4. **The median age of the population will increase from 36.6 years in 1990 to 40.6 years in 2005. The number (31 million) and the percentage (13%) of Americans over 65 years old are already at record levels, and the real growth is still to come.**
5. **It is predicted that the percent of single-parent households, mostly headed by women, will continue to increase.**

6. The decline in the youth population will turn around in 1995. The net result is that for the decade of the 1990s, the number of 18-year-olds will rise from 3.5 million to 3.8 million, an increase of almost 10%.

16-19-year-olds in Labor Force

<u>YEAR</u>	<u>(000s)</u>
1980	9,378
1985	7,901
1990	7,410
1995	7,576
2000	8,474
2005	8,793

7. During the 1980s, most of the population growth occurred in metropolitan areas, and by 1990 more than one-half of the population resided in those areas. Depopulation of rural areas and growing urbanization will continue in the next decade.

## B. IMPLICATIONS

1. Immigration has both direct and indirect effects on Army recruiting.
  - By statute, immigrants who become permanent residents are permitted to enlist, and about 4-5% of Army (Active and Reserve) enlistments are permanent residents. Thus, immigrants already constitute a small portion of the recruiting market. This is the direct effect.
2. Immigration also affects the youth labor market and thus indirectly influences the supply of enlistments.
  - Immigrants tend to be considerably younger than the native population: 22.6% are 15-24 years of age compared with only 15% of natives. Studies suggest that immigration has a strong negative effect on youth wages, especially for minority youth, and a weak negative effect on youth employment. In recent decades, the growing proportion of immigrants who are unskilled has increased the competition for entry-level jobs with American youth. Presumably, immigration makes the military a more attractive option for native youth.
3. The Army's manpower pool in the 21st century will be composed of a greater percentage of minorities, immigrants, and women.

4. **More potential recruits will come from single-parent households. To the extent that they are headed by women, the pool of recruitable women will drop.**
5. **To the extent that more Army families will themselves be single-parent households, Army policies may need to be adjusted along the lines of those adopted by civilian employers.**

### **C. ISSUES/QUESTIONS FOR POLICY AND PLANNING**

1. **Immigration currently accounts for 17% of U.S. population growth and, with birth rates relatively low, is expected to account for an even greater share of future population growth.**
  - It is important that manpower planners monitor trends in the number of new immigrants, their ages, skills and training, and regional locations. Immigration trends affect the Army's ability to recruit in the all-important youth labor market.
2. **If the Army does not have a strong foothold in the minority recruiting market and the minority segment of the population continues to expand, then the pool of those available and interested in enlistment may decline, in both absolute and relative terms. This issue seems to be more acute for Hispanic and Asian segments of the minority population.**
3. **To attract the growing Hispanic population, for example, the Army may need to alter recruitment and training policies.**
  - Hispanics vary in their educational background and ability to cope in American society. Nearly 3 in 4 continue to speak Spanish in the home. It is estimated that only 26% are fluent in English. The Army may need to provide special training, perhaps even basic English skills, to maintain a representative Hispanic population.
4. **Some defense observers have questioned whether certain groups may hold ethnic or racial group loyalties that may prevail over their sense of being an American or their willingness to support the nation. Although there is little historical basis for this position, it may re-emerge with the rising number of immigrants, especially Hispanics, who maintain close cultural, linguistic, and generational ties to their home nations.**

**5. A number of demographic trends—in particular the aging of the population and the growing number of immigrants—have important implications for national priorities.**

- The aging of the nation will likely increase the demand for more health care and other social services aimed at older people. The growing immigrant population has already begun to strain public schools, welfare and other social services in certain states, particularly California. These demographic factors are converging to apply greater pressure to shift federal budget priorities from defense to social programs.
  - The costs of the elderly already dominate federal spending. Programs that support the elderly currently account for one-third of all federal spending (54% of federal social spending).
  - At current rates of increase, the elderly will account for one-half of all federal spending by the year 2000.

# REGIONAL PATTERNS

---

## A. TRENDS AND PROJECTIONS

**1. Net migration of the population is expected to slow in the next two decades.**

- Mobility of the population has slowed in recent years. Annual migration rates in the 1950s, 1960s, and 1970s hovered in the 20–22% range. The rate began to fall in the late 1970s, and reached a low in 1982 of 16%. This decrease is due in part to the aging of the “baby boomers”; but it is also being observed for the youth population. One reason is that young people are living at home longer. Interstate migration also has declined, due to the growth of two-career families and significant regional differences in housing costs.
- As overall migration slows, the migration of population and employment to the South and West will also slow in future decades compared to the rapid pace of the last two decades.

**2. Despite a projected slowdown in population migration, in the next two decades, 94% of the net increase in U.S. population will still occur in the South and West regions.**

- During 1990-2000, the West will grow by 14%; the South is predicted to grow by 10%; while the Northeast and Midwest will grow by only 1-2%.
- The fastest growing states will be: Arizona, Nevada, New Mexico, Florida, Georgia, Alaska, Hawaii, New Hampshire, California.

**3. Over one-half of population growth in the South will be from migration, while a large share of growth in the West will be from immigration.**

**4. Growth of the youth population also will be most rapid in the South and West regions; by 2000, 60% of 18–24 year olds will reside in the South and West.**

**5. Active-duty Army enlistments are drawn disproportionately from the South, while the West is underrepresented.**

**6. The “Far West” region will experience the fastest employment growth during 1990–2000; the New England, Midwest and Great Lakes states will experience below-average employment growth.**

**7. Enlistment qualification patterns are lowest in the South and West; but youth propensity for military service tends to be higher in these regions.**



### **8. Enlistment propensity among racial/ethnic groups differs by region.**

- In the Northeast, for instance, Hispanics have the highest propensity; in the South, blacks have the highest propensity; in the West, Hispanics and "other" racial/ethnic groups have the highest propensity.

## **B. IMPLICATIONS**

### **1. Recruiting markets continue to shift toward the South and West and away from the Northeast and Midwest.**

### **2. The composition of the recruiting market in each region is changing.**

- For example, the Northeast has been one of the most difficult recruiting regions. While the population will grow there, by about 1.5 million people, the region will lose one million out-migrants. The positive net population growth will stem from an excess of births over deaths, and international immigration. Unfortunately, from a recruiting standpoint, migraters tend to be in prime recruiting ages, whereas newborns and immigrants are not.

### **3. Reserve unit supportability is most heavily affected by population shifts in local and regional markets.**

- Reserve units currently are concentrated in the Northeast and Midwest regions, which will experience slow population growth and continued out-migration.
- Future stationing (activations, relocations) of Reserve units may need to target markets in the South and West regions.

### **4. A fundamental downward shift in migration appears to be taking place. It will remain to be seen whether this shift is permanent or temporary.**

## **C. ISSUES/QUESTIONS FOR POLICY AND PLANNING**

### **1. How sensitive is Reserve and Active recruiting to regional population shifts? If the decrease in geographic mobility is permanent, how does the more stable population affect Active and, especially, Reserve recruiting? Presumably, a more stable population will reduce unit turnover and improve unit stability and readiness.**

- 2. Should recruiting efforts concentrate on areas of rapid growth with high in-migration or on areas of slow growth and high out-migration? How is Reserve unit supportability affected by migration?**
  - Low employment growth initially may stimulate Reserve enlistments. However, persistent unemployment causes out-migration, which will generate unit turnover.
  - Overall, Reserve unit supportability may require location in markets in which the population and economic base are relatively stable.
- 3. Will the rapidly growing Hispanic population in the South and West provide a large pool of qualified and interested youth?**
- 4. How will the growth of immigrants in the South and West affect the recruiting pool? The qualifications of those in the pool? The enlistment propensity of those in the pool?**
- 5. Reserve unit stationing actions must be aligned with future markets, not with past markets.**

# THE ECONOMY

---

## A. TRENDS AND PROJECTIONS

1. **The growth rate of the economy, as measured by annual changes in real GNP, will slow to only 2.3% per year during the period 1990-2005, slower than the growth rate of 2.9% per annum in the previous fifteen years. Consequently, real disposable income is predicted to grow only 1.5% per year between now and 2005, compared to a 1.7% growth rate during the last 15 years. These trends are due to a number of factors:**
  - The rate of growth of the population is predicted to slow to only 0.8% per year. Associated with this, the growth rate of the labor force will slow to 1.3% annually, compared to a 1.9% growth rate in the previous fifteen years.
  - The change in the composition of the labor force, due especially to relatively unskilled immigrants from abroad, will also be a factor, as is the industrial shift from manufacturing to the service sector.
2. **The Bureau of Labor Statistics predicts that productivity growth (real GNP per employee) will grow about 1.0% annually. This is about the same growth rate of productivity that was registered in the previous 15-year period.**
3. **Most forecasters predict accelerated international economic integration in coming decades. The growth of computers and telecommunications systems will spur the growth of international information transfer and loosen the constraints of geography on production. Multinational production arrangements will proliferate as will the internationalization of capital.**

## B. IMPLICATIONS

1. **A major issue is whether our standard of living will decline in the next 15 years or so. Several factors suggest that the productivity of American workers will continue to decline. These include:**
  - Declines in educational attainment and aptitudes;
  - The growth of the labor force will be the slowest in four decades;
  - Capital spending per employee is predicted to grow slowly, less than 1% per year;
  - The growth of immigrants in the labor force;

- A continuing shift from the manufacturing sector to the service sector in which productivity gains are more difficult to achieve; and
  - Continuing globalization of the economy.
2. **The major factor that argues for increasing productivity is that the labor force is aging, and older workers are normally more productive. This may not be sufficient, however, to offset the other factors mentioned above.**

### **C. ISSUES/QUESTIONS FOR POLICY AND PLANNING**

1. **The principal reason changes in economic growth and real income are important is because the nation's economic strength is critical to support national security spending levels. Military end-strength numbers will also be a function of real income levels. Declining real income will not provide a significant demand base to sustain defense spending. For a vivid reminder of the close relationship between economic growth and the ability-to-pay for defense one need only review the events in the U.S.S.R. during the last decade or so. Under a "moderate-growth" scenario, the Bureau of Labor Statistics predicts that defense purchases, in 1982 dollars, will decline from \$259.1 billion in 1990 to \$216.0 billion in 2005, which represents a decrease of 1.2% annually.**
2. **Changes in economic growth are also correlated with U.S. economic power in the global market, international prestige, and "superpower" status. Some observers predict that America's international leadership will be lost in the coming decades. Others predict that the demand for American leadership during these uncertain times in Eastern Europe and the C.I.S. is needed now more than ever and that the U.S., as it did during the Persian Gulf crisis, will continue to act in concert with other industrialized, western nations.**

# THE LABOR FORCE

---

## A. TRENDS AND PROJECTIONS

1. **The youth labor force (ages 16–24) will hit a trough in 1996; after that it will grow gradually. For the 15-year period 1990–2005, the growth rate will be +0.8%, which compares to -0.4% during the previous 15-year period (1975–1990).**
2. **Employment growth during 1990–2005 will average 1.2% annually, which is only about one-half of the 2.3% rate during the previous 15 years.**
3. **The shares of minorities and women in the labor force will grow. The increase will be the greatest for Hispanics, who will rise from 7.7% of the labor force in 1990 to 11.1% in 2005.**
  - New entrants to the labor force are more likely to be women, blacks, Hispanics, and Asians.
  - Leavers from the labor force are more likely to be male, white, and non-Hispanic.

Composition of Labor Force (%)		
	<u>1990</u>	<u>2005</u>
Whites, Non-Hispanic	78.6	73.0
Blacks	10.7	11.6
Hispanics	7.7	11.1
Asians, Others	3.1	4.3

4. **Female labor force participation grew at an annual rate of 2.8% between 1975 and 1990; it is projected to grow at an annual rate of only 1.6% between now and 2005.**
5. **Despite this slower growth rate, the percentage of women who work will increase from 58% in 1991 to 63% by 2005, at which time they will make up 47% of the work force.**

6. **Employment in the service-producing sector of the economy will continue to grow; its share is predicted to increase from 42.9% to 50.0%. The manufacturing sector will remain fairly constant, or decline slightly.**
7. **Occupations with the fastest predicted growth are those with greater educational requirements. Occupations that are predicted to decline are those requiring a high school education only. Thus, there is a growing shift toward occupations requiring post-secondary education.**
8. **Blacks and Hispanics tend to be overrepresented in the slow-growing or declining occupations, and underrepresented in the fastest growing occupations.**
9. **Since 1975, real civilian earnings for all workers have been relatively flat. However, civilian pay of entry-level youth workers, ages 18-24, has declined in real terms over this period. Real weekly earnings of workers in the lowest 20th percentile have fallen the most. These pay drops have been traced to several causes:**
  - **Less-educated workers have been concentrated in industries facing significant import competition, especially manufacturing.**
  - **Low-skilled U.S. workers must compete with their counterparts in other nations who have traditionally received lower wages.**
10. **There has been an increase in the pay premium to a college education compared to high school graduation. This increase in the rate of return to college appears to be somewhat cyclical and may be only a temporary phenomenon that will be eroded as college enrollments catch up. In fact, college enrollment has been accelerating in recent years.**
11. **Higher education and other (non-military) training programs constitute a growing source of competition for high school graduates. College enrollment rates have been increasing sharply as the rate of return to college investment rises. Moreover, there are indications that Congress may wish to implement programs to improve the skills of American workers through training and retraining programs and further subsidies to post-secondary education.**
12. **Although there has been a major upgrading of educational levels of labor force participants since 1971, the educational attainment of new entrants to the labor force has been relatively flat.**
13. **Manufacturing's share of employment will continue to decline, falling to only 14% by 2005 from 17.5% in 1990, and 24% in 1975.**

14. **A recent survey of executives at 1,000 major U.S. companies found an increased recognition of employees' desires to balance family and career.**
  - 92% felt that employees are more concerned than just 5 years ago about balancing family and work. About two-thirds said that companies should offer a "parent track," or slower career path to allow a working parent more family time.
15. **In the 1950s, men constituted 70% of the labor force and the sole support of their families; divorce was the exception; and few workers retired before 65. Today, men are only 55% of the work force, the majority of families have two careers, divorce rates have doubled, and most workers retire before 61.**
16. **The conventional hierarchical management pyramid has been flattened in recent years. The number of organizational levels have been reduced and all personnel must be able to function in diverse capacities. Management restructuring will continue in coming decades as management and labor strive for increased cooperation and flexibility.**

## B. IMPLICATIONS

1. **The upturn in the youth labor force that will occur around 1995 suggests that the shortage of entry-level workers will not be as serious as has been expected, or it may not materialize at all. However, there is little consensus on this point.**
2. **Although the overall shortage of entry-level workers may not be an issue, the "skills mismatch" problem may. A smaller proportion of the youth population appears to be prepared for the occupations that are predicted to grow most rapidly in the next 15 years.**
  - Two-thirds of employers consulted in a recent survey found the *current* pool of applicants for entry-level jobs were insufficiently prepared in basic skills. Applicants were weak in spelling, writing, math, oral communication, flexibility and adaptability, problem-solving, self-direction and initiative, attitudes, and work habits.
  - The jobs of the next decade will be more complex, requiring a higher level of reasoning and basic skills, according to the Secretary of Labor. The education, training, and basic skills of the entering cohorts of workers do not appear adequate to meet the job skills employers will demand in the 21st century.
  - On the other hand, some analysts claim that many work methods will become simpler rather than more technical. They predict that the demand for highly-trained workers will not be as great as some forecasters suggest.

3. **The slow growth of the labor force is a major factor underlying the slower growth rate of the economy in the next 15 years.**
4. **Growing labor force diversity confronts all employers. It affects all personnel policies, including recruiting, retention, training, and job satisfaction.**
5. **There will be increasing competition among employers, including the Army, and colleges for talented young people.**
  - The recession of 1991–1992 has reduced the shortages of entry-level workers that had begun to appear in many geographic areas. These shortages may reappear when recovery begins and continue for the next 5 years.
6. **Changes in the work force and family structure have led to the growth of flexible benefits (such as "cafeteria" plans, reimbursement accounts, child care benefits, elder care benefits, and parental leave).**
  - The trend is for compensation packages to be more closely tailored to the needs of each individual worker. The military has always had a high proportion of total compensation in the form of benefits as opposed to pay. In the future, the military may need to be more creative in tailoring benefits to its changing personnel.

### **C. ISSUES/QUESTIONS FOR POLICY AND PLANNING**

1. **After 1995–96, the target youth cohort population will begin to grow. This may lessen the competition between the military and civilian employers. When this reduced competition is combined with falling real youth civilian pay and a continuing drawdown of the military, the prospects for Army recruiting should improve.**
2. **Indeed, these trends suggest several policy options for the Army:**
  - Recruit pay could be reduced, perhaps by as much as 20–30%. This would allow for a steeper pay table.
  - Enlistment standards could be raised even higher than at present.
  - Prior service accessions for the National Guard and Reserve could be increased.
  - Recruiting resources could be trimmed even more. However, it should be kept in mind that recruiting programs are the most cost-effective way to bring people into the Army, and cutting resources could create serious problems in the long run.



## THE LABOR FORCE

3. **The increasing competition with colleges for high-quality youth suggests that Army educational incentives will need to be preserved. These incentives help the Army tap into the "hi-grad" market.**
4. **The increased diversity of the labor force may hold implications for accession policy. Will the Army need to be representative of all minority groups? Will the growing participation of women in the labor force lead to the full integration of women in military occupations? If so, will special training programs be required to accommodate these groups?**

# TECHNOLOGY AND MANPOWER QUALITY

---

## A. TRENDS AND PROJECTIONS

1. **The "black box" approach for replacement of technological components (in modular upgrade) is considered wise for the Army.**
  - Progress proceeds at different rates for different technologies—some are mature, others rapidly changing.
  - The same considerations need to be addressed in training programs, to keep personnel current and reduce requirements for retraining.
2. **The evolution of smart computer terminals has "unleashed the potential of the individual to control information"—and to make critical decisions on the battlefield.**
  - This factor argues strongly in behalf of good people and good training.
3. **It takes 8-to-15 years to bring a new generation of military technology to useful operation.**
  - A proper balance is required between funding new systems and designing hardware in a modifiable, modular fashion.
4. **The trend toward smart munitions is likely to continue and spread to "smart micromunitions."**
  - Machines will continue to replace some personnel on the battlefield.
  - Robotics will play an important role in reconnaissance, surveillance, urban operations, anti-armor attack, minefield sweeping, logistics, sentry duty, and ordnance disposal.
  - The ultimate conclusion of the trend: "war without men (or women)."
5. **It is estimated that 90% of all scientific knowledge has been generated in the last 30 years, and that the pool of knowledge will double in the next 10 to 15 years.**
  - It is also estimated that the life cycles for electronics products are 3 to 5 years—and they rarely exceed 5 to 10 years in other industries.
  - Entry-level personnel will have to be more flexible and able to continue learning if they are to succeed in the rapidly changing workplace.

## TECHNOLOGY AND MANPOWER QUALITY

- Advances in technology will obviously play a prominent role in shaping the Army's work force. It is likely that the next generation of hardware, although more complex, will also be more reliable and easier to maintain. Nonetheless, new weapon systems will still demand ever-more-skillful operators and maintainers—especially if the capabilities of new systems are to be fully exploited.
- 6. The quality of the Army's work force will probably become a major issue in the years ahead—pitting advocates of highest possible quality standards against those who say the Army can get by with less in austere times.**
- The debate could be softened by smart planning—by designing equipment that reduces complexity as much as possible, improves systems reliability, and eases maintainability.
  - Further steps should be taken to exploit advanced training technologies and improve the training of personnel who will employ future weapon systems.
  - More effort needs to be devoted to fielding systems that are “user-friendly”; which, in turn, would call for improvements in the defense acquisition process (and early incorporation of human-factors considerations).
- 7. It has been noted that the “strategic ramifications and operational effects of emerged and emerging military technology are anything but clear.” But, “our options for the future are very much linked to our technological options.”**

## B. IMPLICATIONS

- 1. Desert Storm demonstrated the value of high technology and personnel training. And, the war argues for continued emphasis on systems that can minimize personal combat and casualties (among friend and foe alike).**
- 2. Increased importance should be directed at acquiring systems that are user-friendly (and planned/acquired with due regard for human factors), as well as optimally reliable and easy to maintain.**
- 3. Rapid advances in technology argue in behalf of “black box” techniques—both in obtaining weapon systems and in training users and repairers.**
- 4. All indications are that there will be a continuing need—if not a growing need—for high-quality personnel and rigorous training. Also, soldier effectiveness has a pervasive influence—as performance factors multiply in series, magnifying the effect of individual quality on outcomes of combat.**

**C. QUESTIONS/ISSUES FOR POLICY AND PLANNING**

- 1. It has been proposed that the military develop and maintain a data base of current and emerging worldwide technologies. This data base would be updated periodically and serve as a reference point for research, development, and applications.**
- 2. Planners need to develop an integrated recruiting/retention system, with personnel quality goals for the total force, to improve manpower cost-effectiveness and force quality.**
- 3. Integration of soldier capability factors into analyses, war gaming, materiel acquisition, resource allocation, and other decision processes would probably improve Army combat- and cost-effectiveness. How can this best be accomplished?**

# RESERVE MANPOWER

---

## A. TRENDS AND PROJECTIONS

1. **Basic force structure issues are unsettled, such as the Active-Reserve force mix. Indeed, the future size and structure of the USAR is still very much in doubt. Other important trade-offs are also being determined, such as that between heavy, medium, and light divisions. The basic strategies that are adopted will also affect the Active-Reserve mix.**
2. **Some observers view Reserve manpower issues as being more complex than those of the active force. The Reserve components have the usual problems of recruitment, attrition, and retention. But the Reserves face several additional problems:**
  - Reserve planners must deal with unit location and market supportability issues.
  - Reserve accessions are drawn from two entirely different markets: older, prior service personnel leaving active duty, and generally younger, non-prior service personnel. But in both cases, accessions are drawn from a local labor pool rather than a national pool as in the case of the active forces.
  - USAR recruiters must compete, especially for the non-prior service enlistee, with a significantly greater number of potential labor alternatives: the other Reserve components, especially the National Guard; the active components; private sector employers; and higher education institutions.
3. **In the long run, the active force downsizing will reduce the pool of prior-service personnel eligible for the Reserves.**
4. **Operation Desert Storm/Shield does not appear to have significantly harmed Reserve recruiting or retention. However, the mobilization performance of certain types of National Guard and USAR units may lead to some changes in policy and, possibly, to the relative growth of the USAR in the Army's total force.**
5. **USAR recruiting has become more constrained by the elimination of "on-demand" unit authorizations and the imposition of required MOS-matches for prior-service enlistees.**

6. **There is a trend toward more senior personnel in the USAR. While the percentage of E-5 and above positions in the USAR inventory remained constant between 1985 and 1990 (at roughly 41%), the percentage of individuals with over 20 years of service in those senior slots tripled (from 9.3% to 28.8%).**
7. **A considerable amount of "attrition" at the Troop Program Unit level is not a loss to the system—attrition often involves transfers among units or reserve centers, often within the same geographic area. Such transfers are typically motivated by opportunities (or the lack thereof) for promotion, which is affected by the billet structure of each unit.**

## **B. IMPLICATIONS**

1. **Historic location patterns of reserve units affect recruiting success, MOS-qualification rates, attrition and transfers, and overall unit readiness. Thus, demographic trends hold important implications for the reserves, especially future stationing actions. Planning new Guard or USAR units must look 10-20 years into the future, due to the lengthy period required to plan, build, and staff new units. Hence, future locations must be analyzed carefully for their market supportability characteristics.**
  - **Changes in regional and local area markets are very important in the stationing process. For example, what is the likely impact of the continuing urbanization of the U.S. population, the de-population of rural areas, and the continued decline of central city areas? Also, what is the impact of the predicted continued growth of the South and West regions and the decline of the Northeast and Midwest?**
  - **Changes in the racial and ethnic composition of markets are also very important. For example, what is the impact of the growth in the Hispanic population in the West? How is the youth labor market in specific market areas (metropolitan areas) affected by immigrants? In particular, how are wage and employment levels of entry-level native workers affected by immigrants in a local area?**
2. **Because of the long planning horizon required to activate new Reserve units, the Army must try to anticipate demographic, economic, and other changes in local market areas. For example, the current emphasis on the high school senior population may be misplaced; instead, analysts may need to concentrate on markets in which the elementary school population is high and growing.**
3. **The trend toward a more senior force in the Reserves tends to increase the cost of filling Reserve missions. It also reduces promotion opportunities for junior personnel, a factor that contributes to first-term attrition.**

- 4. The trend toward more single-parent families headed by women may contribute to recruiting problems as well as to readiness and mobilization problems.**
  - Recruiting may be affected because women tend to be less supportive of military service for their children. In addition, children may need to work to help support the family.
  - Ten percent of reservists sought deferments during the Persian Gulf mobilization, most of whom claimed dependency conflicts.

### **C. ISSUES/QUESTIONS FOR POLICY AND PLANNING**

- 1. Will the reduction in the flow of prior service personnel create future recruiting shortfalls for the Reserves?**
  - Shortfalls are less likely if planned cuts in Reserve end-strengths are proportionate to those in the active force; and, in the short-term, there should be an ample supply of prior service people leaving the downsized active force.
  - On the other hand, the shift to an MOS-based recruiting system means that many prior-service personnel will be "geographically ineligible" for enlistment in the Reserves. They must be retrained to be eligible, which can be a lengthy process for reservists. Alternatively, recruiting policy may shift its emphasis to non-prior-service personnel.
- 2. What is the likely policy response to the readiness problem associated with the Guard's round-out combat brigades? Will infantry units be shifted from the Guard to active duty?**
- 3. The current restructuring and reorganization of Active Army units and the numerous base closures will affect the equipment and facilities available to train reservists. One possible policy would be to relocate Reserve units with a given mission closer to Active units that share the same mission.**
- 4. Where are the "best" future locations for unit stationing actions? This is the output of the NMA (National Market Analysis) system at USAREC. But the NMA may need to be modified to look at more long-range demographic and market changes.**
- 5. What recruiting and training policies will be needed to deal with the likely growth of minorities and women in the Reserves?**

- 6. The nature and extent of competition between the ARNG and USAR units need to be better understood. Certain unit types tend to compete directly, especially in the non-prior-service market, whereas other units may be complementary. Market areas with competitive and complementary units should be identified.**
- 7. The introduction of MOS-specific recruiting may make future accession missions more difficult to attain. Moreover, some market areas may be better than others for recruiting certain MOSs. Thus, information must be developed on the current civilian occupational structure and the size of the workforce by occupation for each local market area. Analysts must also be able to project the occupational structure by local area into the future.**



# ARMY MANPOWER/PERSONNEL AND FORCE STRUCTURE

---

## A. TRENDS AND PROJECTIONS

1. **The Army's active duty strength is scheduled to shrink by more than 30% from 1987 levels.**
  - This will leave about 535,000 personnel in an active Army that has one-third fewer divisions.
  - At the same time, Army *Reserve* components are scheduled to be cut by some 225,000 personnel.
  - Leadership has pledged to avoid involuntary separations as much as possible in achieving reduced end-strength goals—though there will still be *many* involuntary separations.
2. **Most observers believe that active-duty personnel reductions will be considerably more severe than dictated by the current "Base Force" plan.**
  - Many analysts predict that the U.S. will have an active-duty force of about 1.2 million people (or even somewhat less) by the end of the decade.
  - Cuts in Reserve forces may not follow suit because of the perceived need for "reconstitution" of the total force under certain wartime scenarios. However, the drawdown of active forces will cut the supply of prior-service soldiers for the Reserves in the long run.
3. **The Gulf War should be used with caution in drawing "lessons learned"—though the experience will serve to guide policy makers in years ahead.**
  - The war demonstrated the need to have a fully-integrated total force, consisting of active and reserve military personnel and civilians.
  - The emphasis on high-quality troops paid off—and perceptions of the Army's *need* for good people have been strengthened among military leaders, Congress, and the general public. The consensus on quality should help to protect recruiting resources and programs identified as important to personnel retention. Also, end-strength reductions will support the view that high levels of readiness and quality should be preserved.
  - Combat-focused training will continue to be given high priority.
  - There will continue to be a shared view that the Army should be "flexible and prepared for uncertainty." There will also be increased recognition of the need to maintain or improve the training, skill levels, and quality of equipment in the Reserve forces.

## ARMY MANPOWER/PERSONNEL AND FORCE STRUCTURE

- The Gulf War demonstrated that the future battlefield will be a dangerous place for friend and foe alike—with increases in the range and lethality of weapons, the potential use of “dirty nukes” as well as chemical and biological weapons, and the use of terrorist tactics aimed at nonmilitary targets.
- It is not yet clear how the war will affect the longer-term prospects for recruiting in the active and reserve forces; or retention (and skill mix) in the Reserves.

### **4. The planning focus has shifted and will continue to center on regional threats and “crisis response.”**

- Emphasis will be on developing “a force capable of effectively responding to regional contingencies”; one that is “smaller but well-trained, technically sophisticated, flexible, professional, and mobile”; and one that will continue to be involved in counter-drug activities.
- Training will likewise center on preparing for “worldwide contingency operations” that may involve joint-service efforts and new international alliances.

### **5. Military personnel reductions are likely to lower the level of black “overrepresentation” in the Army and possibly limit the enlistment opportunities of women relative to those of men.**

- It is likely that the Army will raise its qualitative standards for both new recruits and persons seeking reenlistment or career service. Higher standards will cut more deeply into the pool of blacks (and Hispanics) than of whites; and these standards could likewise affect the skill-training prospects of minorities who are still able to qualify for basic enlistment (as the competition for “high tech” jobs intensifies).
- Opening of combat jobs to women would add to the difficulties of minorities—especially black men—in qualifying for military service. (There are over 9 million more women than black men, 18 through 23-years-old, who are at least minimally qualified for enlistment.) However, physical standards may operate to limit the eligibility of women in many non-traditional occupations.
- Desert Storm has helped to “legitimize” the removal of minorities from the military. The war carried a message: it is acceptable, maybe even desirable for the greater good, that the level of population participation in the military be made more “representative” of the nation as a whole. Whereas, *overrepresentation* of blacks and other minorities may have been seen as socially beneficial, it is now equally legitimate for policy makers to accept a decline in the level of black participation—especially if it results from what will be called a “natural weeding out process” to assure defense preparedness and spread the burdens of service more “democratically” throughout society.
- Proportionately fewer minorities, as well as women, are currently enlisting in the military.
- It is estimated that, spread over this decade, hundreds of thousands of minorities who may have otherwise joined a larger military force will be turned away. This will result in a “trickle-down effect”—within the civilian labor force—where minorities who may have once qualified for military service (as high school graduates with relatively high test scores

## ARMY MANPOWER/PERSONNEL AND FORCE STRUCTURE

for their demographic group) displace *other* minorities standing somewhat lower on the socioeconomic or educational ladder.

6. **There is some concern about the possible effects of the force downsizing on morale.**
  - Those who will remain in the military—the so-called “survivors”—may tend to be overworked. This could affect their morale and retention as well as unit performance.
7. **It is expected that better indicators of readiness will be developed, partly derived from advances in simulation technology.**
  - Greater emphasis will be placed on large-scale maneuvers and leader development training.
8. **White men will continue to be disproportionately represented in the military's “high tech” occupations.**
  - Enlistment criteria, combined with aptitude tests used to assign new recruits to training in electronics and other highly technical areas, are generally more selective for racial/ethnic minorities and women than for white men.
  - Participation by women in many of these jobs is influenced by legal and policy restrictions on women in combat.
  - Continuation rates of women in high-tech jobs tend to be lower than those of men; minorities, on the other hand, tend to continue longer than their white counterparts in such jobs. Continuation patterns may change in years ahead—as private industry becomes increasingly aggressive in luring early- or mid-career people from highly-technical military jobs (especially women and minorities, who are in short supply and high demand).
9. **Observers see a great potential for conflicts in Third World nations.**
  - “Non-traditional methods” may be necessary to deal with these conflicts.
10. **It is expected that career patterns, stationing, and deployments of service personnel will change considerably in the years ahead. The Army is also expected to become a more CONUS-based force.**
  - “Homesteading” will probably become increasingly prevalent—where service members are assigned to units that are likely to remain in a single location over long periods.
  - Service members may expect just one or two overseas tours during a full career; and the standard U.S. tour will be seven years (as opposed to the current four years). It will thus be possible to pull a full career at one U.S. base with just one excursion out.

## **ARMY MANPOWER/PERSONNEL AND FORCE STRUCTURE**

- The regimental system could be revitalized—where soldiers in large career fields are assigned to battalions of the same regiment for most of their careers. This system could affect promotion opportunities.
- Soldiers may have to become more versatile by being qualified in several occupational areas, instead of one. This would require broader (and longer) training periods.
- Certain military institutions may become more integrated with the civilian culture and surrounding community—such as family housing, schools, churches, clubs, and morale, welfare, and recreation activities.

- 11. The Army may not be taking full advantage of the capabilities of its high-quality personnel. In particular, the Army's occupational structure is criticized for being based too heavily on narrow task assignments.**

## **B. IMPLICATIONS**

- 1. There are many possible consequences of a large reduction-in-force, both direct and indirect, internal and external to the Army. Several of the organizational effects will create problems—at least in the short term.**
- 2. There will be a convergence of several projected changes that could affect the relationship of the military and society—including the scaling-down of the organization, major efforts to save money, creation of new linkages between the military and its surrounding community, a changing demographic mix of soldiers, and a rising threat of small-scale, dangerous deployments (as opposed to nuclear conflagration or massive, conventional war).**
  - Will the military become closer to or more distant from the society it serves?
  - How will these changes affect recruiting and retention programs?
- 3. "Homesteading," with fewer overseas tours and PCS moves, is likely to create greater stability among families—making it easier to have both a family (with dual-earners) and a military career.**
- 4. Seven-year tours and regimental-system assignments could affect the promotion opportunities of soldiers; in particular, lengthening the wait for non-commissioned officers. This, in turn, could have an adverse effect on retention.**

## **ARMY MANPOWER/PERSONNEL AND FORCE STRUCTURE**

5. **Army manpower policy may shift toward an occupational structure with fewer MOSs and the tasks associated with each more broadly defined. This policy shift would allow broad-based training and greater utilization of the high-quality soldiers currently being recruited.**

### **C. QUESTIONS/ISSUES FOR POLICY AND PLANNING**

1. **More research needs to be undertaken concerning the manpower/personnel implications for the reduction-in-force, including a downsizing that would leave the military at about one-half its 1987 level. Among the questions: effects on attitudes toward the military, from within and without.**
2. **How can the nation and military maintain a "pessimistic approach to national security" that remains prepared for the worst-case scenarios? Will the military be prepared to "accommodate different futures"?**
3. **What are the policy issues and consequences of a shift in population representation in the military—as predicted under the planned reduction-in-force?**
4. **Should we be drawing other (any?) manpower and personnel "lessons" from the Gulf War? Perhaps, the best lesson is that there are no lessons?**
5. **Will the military be able to compete effectively with civilian industry for the services of persons capable of working in "high tech" jobs?**
6. **What are the positive and negative consequences of "homesteading"? Will certain shifts in stationing of personnel slow promotions to the point that career patterns and job satisfaction will suffer? As "opportunities to see the world" slowly disappear, will recruiting and retention lose a powerful lure?**
7. **If the Army becomes more integrated with the surrounding civilian community—through school systems, churches, housing, recreational services, etc.—will the traditional bonding of the individual to the unit be broken? Will the unit be "fractured"? What will happen to the close ties and supporting environment that presently exist within the military community?**
8. **How can the military help to eliminate self-defeating parochialism and traditional resistance to change? Should the military take a more active role in helping to shape its own destiny? If so, how?**

### Distribution List

<u>Agency</u>	<u>No. of copies</u>
Defense Technical Information Center Cameron Station Alexandria, VA 22314	2
Dudley Knox Library, Code 0142 Naval Postgraduate School Monterey, CA 93943	2
Office of Research Administration Code 08 Naval Postgraduate School Monterey, CA 93943	1
Library, Center for Naval Analyses 4401 Ford Avenue Alexandria, VA 22302-0268	1
Department of Administrative Sciences Library Code AS Naval Postgraduate School Monterey, CA 93943	1
Department of Administrative Sciences Code AS/Mp Naval Postgraduate School Monterey, CA 93943	5
Department of Administrative Sciences Code AS/Eb Naval Postgraduate School Monterey, CA 93943	5
U.S. Army Recruiting Command USAREC-PAE-RS Attn: Maj. Allan Poikonen Ft. Knox, Kentucky 40121	3